

Dictionary of Technical Terms Relating to the Textile Industry.

(Continued from page 122.)

Web:—A textile fabric, especially as in the piece or as being woven in a loom.

Webbing:—A woven strip of material made of strong fibres, used for girth's, surcingles, straining-pieces of saddles, and upholsterers foundations for seat-bottoms, *i. e.*, materials which are intended for strength. The strong edging of rugs, etc. Any woven texture; the structure of a web.

Weevil:—A beetle of the Curculionidæ family, which attacks the bolls of the cotton plant.

Weft:—The English term for filling; the series of threads technically termed picks or shoots thrown at weaving into the shed at right angles to the warp, from selvage to selvage, by means of the shuttle. Weft yarns, as a rule, are composed of a shorter length of fibre, contain less twist, and consequently are weaker than warp yarns, some in fact only just standing the strain of picking.

Weft Bars:—Broad bars or stripes running across the fabric, usually caused by bobbins containing different counts or twists of yarn, *i. e.*, unevenly spun yarn, being woven in alongside one another. Such bars may also be caused by the let-off or take-up motion of the loom working defective, resulting in a variation in the picks per inch in the cloth.

Weft or Filling-fork:—The small pronged fork which acts as the medium for the operation of the weft, *i. e.*, filling stop-motion in the loom in the event of breakage or failure of the weft, *i. e.*, filling.

Wefting:—The actual operation of inserting the picks into a fabric; synonymous with *beating-up* or *picking*.

Weft or Filling-way:—Yarn twisted over to the right in spinning.

Weigh-box:—Second drawing frame, or fourth gilling box in open drawing (worsted yarn spinning) at which the slivers are automatically weighed.

Weighted Silk:—Silk yarns or fabrics which have been treated with solutions of metallic salts or tannin

it was necessary to treat the silk in order to make up the 25 ounces. At the present day 100 ounces of raw silk in many cases come out of the dye-house weighing 200 or 300 ounces. Sometimes what is sold as silk is a mere agglomeration of heterogeneous matter, devoid of cohesion, held temporarily together by a little silk. The elasticity and tenacity of the silk are sensibly diminished. Ordinary silk is sparingly combustible, but this weighted silk burns like tinder if touched with flame, and it is liable to undergo spontaneous combustion. It leaves an ash of oxide of iron exceeding 8 per cent. Weighting or loading of silk is the same as sizing is to cotton.

Welborn Pet:—A cotton plant originated by Jeff Welborn, New Boston, Tex. Developed from selected plants in a field of Barnes, Jones Big Boll (Jones Long Staple), and Zellner. Plant erect, slender; limbs short and numerous, very prolific; bolls round, medium in size, clustered, maturing early; lint 31 to 32 per cent, staple 22 to 25 mm. This variety has but little foliage in proportion to the size of the plant, which many cultivators claim is an advantage in hastening early and uniform maturity. One of the best known cluster varieties.

Weld:—The yellow dyeing-color employed before the introduction of quer-citron. It is the herb *Reseda ruteola*, and sold in the sheaf, like straw; the whole of the plant, except the roots, were employed in dyeing, but the greater part of the color resides in the seeds and upper extremity.

Welsh Flannel:—Flannel made from the fleece of the flock of the Welsh mountains; chiefly manufactured by hand. It is held in high esteem in Great Britain and elsewhere for under vestments and other purposes.

Welsh Mountain Sheep:—A variety of English sheep peculiar to the mountains of Wales—regarded as one of the hybrid races of English sheep.

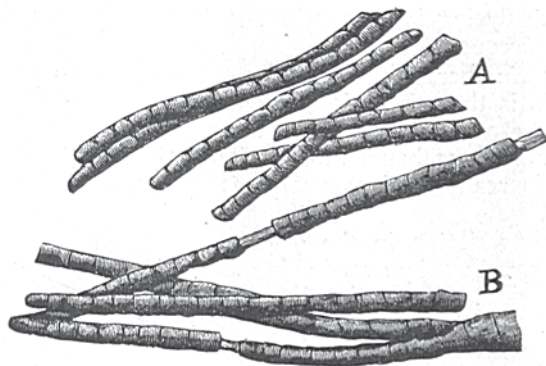
Welsh Sheep:—Pure English breeds of sheep inhabiting Wales.

Welsh Wool:—Wool having a hair-like texture, deficient in the spiral form and fineness of fibre, upon which depends the relative value of high-class wools. They are only suited for goods where shrinking and felting are not required; chiefly used for flannels.

Welt:—A strip of material applied to a seam to cover or strengthen it, or fastened to parts of a fabric or construction at their seam or joint; also, a covered cord or an ornamental strip sewed on a border or at a seam to give protection or greater strength.

In knitting:—(a) A flap knitted by itself and then engaged with the main body by looping or hand-knitting, as the heel-piece of a stocking. (b) A ribbed piece forming the finished-end, as the end of a sleeve or sock, to keep it from rolling together.

West Indian Cottons:—Cottons more valuable in staple than other Indian Cotton. The principle varieties are La Guayran, Mangarole, Macedonia and Carthage.



WEIGHTED SILK.

A. Weighting from $1\frac{1}{2}$ to 2 times its weight.
B. Weighting from $3\frac{1}{2}$ to 4 times its weight.

which are readily absorbed by the fibre. The original intention was to restore the weight which was lost in the boiling-off operation. Thus 100 ounces of raw silk yielded about 75 ounces of boiled-off silk; in order to return 100 ounces to the customer

Wet Spinning:—In this process flax fibres, previous to their spinning, are wet in warm water of about $120^{\circ}F$. This softening of the flax fibres is based upon the fact that they are, comparatively speaking, perfectly inelastic. When softened in hot

starches, neither is it so clear and transparent; and it does not stiffen cloth quite as much, and is therefore mostly used for soft and light finishes. It is usually sold as a white powder, with a slight crisp feel and glistening appearance.



WILD SHEEP: *Argals of Siberia.*

water, their elasticity is raised to about $\frac{1}{10}$ th, in addition to which they are rendered more adhesive to one another, and will lie closer in the process of twisting.

Wethers or Wether Wool:—The term applied to the second and following fleeces yielded by sheep. The fibres are of a coarser nature than that of Hog's wool (first fleece) and such staples are used for a more medium class or counts of yarn or a coarser kind of woolen material. Wethers are generally good one or two year old fleeces. *Yearlings* is another term used for this class of wool.

Wheel:—In embroidery and fancy work, an opening filled with threads radiating like the spokes of a wheel.

Wheel-presser:—The winged wheel acting as a presser on circular knitting machines.

Whipcord:—A diagonal weave, with strongly marked ribs or cords. Hard twisted worsted twills, either solid or mixed colors. The name is from the hard twisted fibre lash of a whip. The weave was originally used exclusively in riding-breeches, being an imitation of corduroy. It afterwards found favor as a suiting fabric, and very shortly came to be copied in woolen dress fabrics.



WILD SHEEP: *Big Horn or Rocky Mountain Sheep.*

Wharve:—See Warl.

Wheat Starch:—This is obtained from wheat flour by a process of washing with water, which separates it from the other ingredients of the flour. It is the product always referred to when starch is spoken of without qualification. Wheat starch is largely employed in finishing and in sizing. It makes a stiff paste with water, not, however, so stiff as that yielded by farina or Indian corn

Whip Net:—A kind of netting woven on the gauze loom with a heavy warp, widely set.

Whipping:—This is the operation of giving the threads a few half turns under the cop bits a few draws after doffing. In some cases it entirely substitutes starching, and in others, where very good bottoms are required, both starching and whipping are resorted to.

- Whip-roll:**—In weaving, a roller or bar over which the yarn passes from the warp-beam to the reed, the pressure of the yarn on the whip-roll serving to control the let-off mechanism.
- Whip-thread:**—One of the systems of threads necessary for gauze or leno weaving; the crossing threads in gauze weaving, also known as *Douping warp*, and which in gauze weaving are made to twist around their mate standard threads.
- White-goods:**—A commercial name given to a variety of cotton fabrics, embracing jaconets, cambrics, nainsooks, mulls, lawns, brilliantines, India twills, dimities, shirtings, dress-linings, quilts, piqués, Swiss muslins, French organdies, tarlatanes, percales, etc.
- White Oakum:**—Coarse hemp or flax hacklings (positively untared oakum).
- Whites:**—Those varieties of silkworms producing white cocoons.
- Whiting:**—Used in cotton finishing like China clay.
- Wick:**—A band of loosely twisted or woven fibres, or a substitute, operating by capillary attraction, to convey a constant supply of any liquid illuminant to a flame. For candles around wick of loosely twisted soft spun cotton fibres is generally used; for oil-lamps, a flat woven wick.
- Wide Sheetings:**—Cotton cloth, ranging in width from 72 to 108 inches; used largely for bed sheetings.
- Wigans:**—A stiff, plain or twilled gray canvas-like fabric of medium quality and weight, used for protecting and stiffening the lower inside edge or borders of garments, as on women's dresses under the train, or the bottoms of trousers.
- Wild Sheep, or Mouflon:**—This designation comprises the Argali of Siberia; the Big-Horn or Rocky



WILD SHEEP: *The Audad or Bearded Argali.*

Mountain sheep of California; the Aoudad, or bearded Argali, of Africa; and the Mouflon of Europe. A sub-variety of the Mouflon family is the Nemorhedinae, or goat-like antelope. One more sub-family is comprised in the species

Prong-Horn Antelope. Whether or not the domestic sheep is derived from any of these wild, sheep-like creatures, there is no doubt but that the same was first domesticated in Asia, and from there, with the advance of civilization, introduced into Europe, America, Africa, and Australia. No doubt the wild sheep possesses great interest in illustrating the probable origin of our domestic varieties; yet the latter alone are of special interest to us as animals producing wool in quantities for textile purposes.

The Formation of Aniline Black.

The only method of dyeing aniline black in the cold is the single-bath method; the oxidizing and steaming methods require the influence of heat to commence the reaction. On account of the large proportion of water employed in relation to the aniline it is not possible to measure the heat produced by the reactions accomplished in any of these methods. *Erban* has tried to get over the difficulty by employing a method analogous to that patented by *Mommer* and *Jagenburg*, which does not call for previous dessication.

The cloth was placed in a basic solution of aniline salt and chlorate containing a small amount of vanadium, and then in a chamber maintained at a temperature of 85 to 110 deg. *F.*, the atmosphere within being saturated with moisture. Thus it is found that the oxidation can be produced by two essentially different ways.

In the one case the color passes from yellow to pale green and then dark green; the quantity of chlorate can be considerably reduced, the operation interrupted at any moment, and terminated by chroming; this is the case producing dry oxidation.

In the other, the material is colored at first a brownish grey, which passes gradually to a deep brown and which cannot be changed to black by the action of bichromate, if the proportion of chlorate has been reduced; this is the wet oxidation.

In the case of trials effected on the large scale it was observed, after 30 hours, that a rise in temperature within the chamber had taken place; afterwards the temperature continued to rise. The interior portion of the cotton is black and the exterior parts are always brownish grey, and do not give the same black by chroming. The rise in temperature reaches a point at which energetic oxidation takes place. In the presence of larger amounts of vanadium the temperature rises still more rapidly.

Where the initial temperature of the chamber was 104 deg. *F.*, it reached 175 to 185 deg. by the end of the second day, then fell rapidly.

The oxidation is not satisfactory when the maximum temperature does not reach 120 deg. *F.*

Meta- and Para-Cresol.

These two important raw materials for dye-making have hitherto been difficult to separate. *MM. Terrisse & Dessoulavy* according to a late German patent have now discovered that if they are both converted into their calcium compounds, by treatment with the chloride of that metal, and then treated with moderately superheated steam, the meta-salt is decomposed, and the meta-cresol carried away by the current of steam, from which it is easily condensed, the para-salt remaining behind unacted on.